

Table 1. Attribute Change Table for RBR Class Changes

RB R_ id	r e q - k e y	req cate gory	seg men t	req _ty pe	a_ve rif_ met hod	a_verif_stat	text	interpretation text	clar._tex t
S C F- 00 01 #A	2 3 9 7	TB DN <u>/A</u> <u>pro</u> <u>ced</u> <u>ural</u>	N/ A_ <u>pro</u> <u>ced</u> <u>ural</u>	pr oc ed ur al	N/ A_ <u>pro</u> <u>ced</u> <u>ural</u>	N/A <u>not verified by ECS</u>	The SCF interface platform shall adhere to requirements specified in the Data Production Software and SCF Standards and Guidelines, GSFC 423-16-01. This standards document includes SCF requirements for operating system, computer communications, e-mail protocol, and windowing protocol.	External requirement: Information only. No action is required by ECS.	
S C F- 00 10 #A	5 7 5 0	TB DN <u>/A</u> <u>pro</u> <u>ced</u> <u>ural</u>	SD PS N/ A_ <u>pro</u> <u>ced</u> <u>ural</u>	pr oc ed ur al	N/ A_ <u>pro</u> <u>ced</u> <u>ural</u>	not verified by ECS <u>not verified by ECS</u>	The SCF interface shall consist of an ESDIS approved computing platform that shall have a C compiler. To access FORTRAN routines in the ECS Toolkits, the platform shall also have a FORTRAN compiler.	External only requirement: Information only. No action is required by ECS.	
S C F- 00 20 #A	5 7 5 3	TB DN <u>/A</u> <u>pro</u> <u>ced</u> <u>ural</u>	CS MS N/ A_ <u>pro</u> <u>ced</u> <u>ural</u>	pr oc ed ur al	N/ A_ <u>pro</u> <u>ced</u> <u>ural</u>	not verified by ECS <u>not verified by ECS</u>	The SCF interface platform shall supply the DCE client and have an I/O communication port and the ability to run TCP/IP software for communication to the ECS.	External only requirement: Information only. No action is required by ECS.	
S C F- 00 04	5 8	TB DN <u>/A</u> <u>pro</u>	CS MS N/ A_	pr oc ed ur	N/ A_ <u>pro</u> <u>ced</u>	not verified by ECS <u>not verified by ECS</u>	The SCF interface platform shall provide one of the following levels of security for interoperation with ECS:	External only requirement: Information only. No action is required by	

25 #A	6	<u>ced</u> <u>ural</u>	<u>pro</u> <u>ced</u> <u>ural</u>	al	<u>ural</u>		a. Kerberized authentication for bi-directional file transfers. b. User of Distributed Computing Environment (DCE) for authentication of users, authorization of users for access to services such as remote file access, and provision for integrity of data being transferred.	ECS.	
S C F- 00 30 #A	2 4 0 5	TB DN <u>/A</u> <u>pro</u> <u>ced</u> <u>ural</u>	SD PS <u>N/A</u> <u>pro</u> <u>ced</u> <u>ural</u>	pr oc ed ur al	<u>N/A</u> <u>pro</u> <u>ced</u> <u>ural</u>	<u>not verified by ECS</u>	The SCF interface platform shall have adequate computing resources for the storage, compilation, linking, and execution of ECS supplied software resident on the platform.	External only requirement: Information only. No action is required by ECS.	
SC F- 00 40 #A	2 4 0 8	TB D	SD PS <u>N/A</u> <u>pro</u> <u>cedu</u> <u>ral</u>	int erfa ce	<u>test</u>		The ECS shall have the capability to send to the SCFs the Data Production Software Specification Requirements describing what is required for completing the Initial Data Production Software Specifications.		
S C F- 00 60 #A	2 4 1 4	TB Dm <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>de</u> <u>mo</u>	<u>un-verified</u>	The ECS shall have the capability to provide to the SCF the Toolkit Delivery and Update Package. This package includes the PGS toolkit which supplies tools for the emulation of the ECS production environment and contains a ECS-standardized software routines to aid in science data production software development.		
S C F- 00 70 #A	2 4 1 7	TB Dm <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u>	SD PS	int erf ac e	<u>de</u> <u>mo</u>	<u>un-verified</u>	The ECS shall have the capability to provide Integration and Test Specifications to the scientist at the SCF. These specifications are defined by the Data Processing Focus Team.	<u>These specifications are actually requirements for the science software packages that SCFs provide to DAACs and the Data Processing</u>	

		<u>al</u>					These specifications are implemented in the Data Production Software Delivery Package and support smooth integration of the data production software into the ECS production environment.	<u>Focus Team is no longer in existence.</u>	
S C F- 00 80 #A	5 7 7 3	TB Dm issi on ess enti al	SD PS	int erf ac e	de mo	<u>un-verified</u>	The ECS shall have the capability to provide an Interactive Session Dialog with the SCF. This dialog, to aid integration and test of the data production software into the ECS production environment, shall support, at a minimum, general communications between the ECS and the SCF that include logins, mail messages, status reports, test coordination, test execution scripts, and solutions to minor problems.	<u>The specified messages, reports, coordination, and problem solutions are provided via email. Security concerns preclude login by users except as provided for by SCF-0085.</u>	
S C F- 00 90 #A	2 4 2 2	TB Dm issi on ess enti al	SD PS	int erf ac e	test	<u>un-verified</u>	The SCF shall have the capability to provide ECS with the Data Production Software Delivery Package with "Required Items For Delivery" as specified by the Science User's Guide and Operations Procedure Handbook for the ECS Project.	<u>This implies a requirement for ECS to receive Data Production Software Delivery Packages that SCFs send</u>	
S C F- 01 00 #A	2 4 2 5	TB Dm issi on ess enti al	SD PS	int erf ac e	test	<u>un-verified</u>	The ECS shall have the capability to forward Test Products to the SCF. These products generated by the science software at the ECS will require the review of the scientist at the SCF who submitted the software.	<u>"Test products" are the "results of science software testing" per a test plan provided to the DAAC by the SCF that developed the science software to be tested.</u>	
S C	2	TB Dm	SD PS	int erf	de mo	<u>un-verified</u>	The ECS shall have the capability to	<u>"Test Product Reviews" are SCFs'</u>	

F-0110 #A	428	<u>issison essential</u>		ace			receive Test Product Reviews from the SCF. These reviews shall include the comments and recommendations of the scientist at the SCF who has reviewed the Test Products.	<u>analyses of the results of science software testing per SCF-provided test plans (i.e., Test Products).</u>	
SCF-0120 #A	2431	<u>TB Dm issison essential</u>	SD PS	interf ace	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to receive Data Production Software Updates from the SCF. These Data Production Software Updates include modifications to any data production software already submitted to the ECS by the SCF. The Data Production Software Updates may include some or all the items required in the Data Production Software Delivery Package.		
SCF-0200 #A	2440	<u>TB Dm issison essential</u>	SD PS	interf ace	<u>demo</u>	<u>un-verified</u>	The ECS shall have the capability to receive from the SCF a QA Notification Specification. This specification, submitted by the scientist at the SCF, describes the conditions under which data should be forwarded to the SCF for QA.	<u>This requirement enables SCFs to enter subscriptions including trigger event and resulting actions. The only subscription trigger event or condition in Rel A is insertion of new data.</u>	
SCF-0210 #A	5939	<u>TB Dm issison essential</u>	SD PS	interf ace	<u>demo</u>	<u>un-verified</u>	The ECS shall have the capability to send a Data Quality Request Notification to the SCF. This notification is sent when QA notification criteria are met during routine ECS processing. The notification states the data product and the time by which a notification, and optionally data, must be evaluated and returned to the ECS for inclusion as an update to the	<u>This notification is an action to be taken by ECS after the occurrence of a triggering event per a subscription that the SCF had previously entered. SCFs no longer have a time limit by which they must complete their QA of</u>	

							product metadata.	<u>science data, but the metadata will reflect the lack or presence of the QA.</u>	
S C F- 02 20 #A	2 4 4 2	TB Dm issi on ess enti al	SD PS	int erf ac e	de mo	<u>un-verified</u>	The ECS shall have the capability to receive from the SCF a Request for Data to QA. This request may be a standing request specified in the QA Notification Specification and may include the data product specified in the Data Quality Request Notification, or other data required by the scientist to QA the data product.	<u>This is a request for data distribution whether the request is made as part of a subscription or as a data order</u>	
S C F- 02 30 #A	2 4 4 4	TB Dm issi on ess enti al	SD PS	int erf ac e	de mo	<u>un-verified</u>	The ECS shall have the capability to send Data Delivered for QA to the SCF. This data includes the data requested by the scientist needed for the QA of data products.	<u>This is a distribution of data as requested by the SCF.</u>	
S C F- 02 40 #A	2 4 4 6	TB Dm issi on ess enti al	SD PS	int erf ac e	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to receive an On Time QA from the SCF. This shall consist of the science QA codes describing the results of product QA and any further instructions to the ECS. The ECS shall accept the On Time QA when it is received within the time-out period specified in the Data Quality Request Notification. ECS shall accept post-time-out QA updates as Metadata Updates as specified by Requirement SCF-0250.	<u>On Time QA is reflected in ECS as Metadata Updates that are made in response to data QA by the SCFs. Also, no distinction is presently made between on-time QA and QA that is not on time.</u>	
S C	2	TB Dm	SD PS	int erf	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to	<u>On Time QA is the same as Metadata</u>	

F-0250 #A	448	<u>issison essential</u>		ac e			receive Metadata Updates from the SCF. These shall include the science QA codes and optionally a report describing the results of product QA and any further instructions to the ECS. The ECS shall only accept Metadata Updates when they are received after the time allotment specified in the Data Quality Request Notification.	<u>Updates. Also, no distinction is presently made between on-time QA and QA that is not on time. Metadata updates will be accepted whenever appropriate.</u>	
SC F-0260 #A	2450	<u>TB Dm ission fulfillment</u>	SD PS	interf ace	<u>demo</u>	<u>un-verified</u>	The ECS shall have the capability to make a Reprocessing Request Template available to the SCF. This template will be used by the scientist at the SCF to prepare a Reprocessing Request.	<u>This requirement assumed that an ASCII file would provide a template for preparing of requests. The required information about preparation of requests will be provided in forms other than an ASCII file.</u>	
SC F-0270 #A	2452	<u>TB Dm ission essential</u>	SD PS	interf ace	<u>demo</u>	<u>un-verified</u>	The ECS shall have the capability to receive a Reprocessing Request from the SCF. This request, at a minimum, contains the following, a list of all the products to be generated, the version numbers of the science software and calibration coefficients, a list of all ancillary data, and data start and stop times.		
SC F-0280 #A	2454	<u>TB Dm ission essential</u>	SD PS	interf ace	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to supply a Reprocessing Status to the SCF. This status that includes the reprocessing schedule informs the scientist at the SCF the status of his reprocessing request and provides notification upon completion of the	<u>Reprocessing status and processing status are identical. SCFs request notification of completion by entering a subscription to insertion of the data product being</u>	

							reprocessing by the ECS.	reprocessed.	
SCF-0300#A	3453	TBD	SDPS+ESMSN/A	procedural	test		The SCF shall have the capability to install and make operational in the SCF environment all COTS products that are required by Local Data Access Services.		
SCF-0310#A	6430	mission essential	SDPS	interface	demo	un-verified	The ECS shall have the capability to receive Calibration Coefficient Requests from the SCF. The current or past calibration coefficients used in processing of instrument data may be requested by the scientist from the ECS.	1: Calibration data are accessed by HTML services provided through Data Server	<u>Calibration coefficients are interpreted as 1) calibration and other coefficients and 2) SCF-generated ancillary data needed by the DAAC processing of science software.</u>
SCF-0320#A	2460	TBDmission essential	SDPS	interface	<u>demo</u>	<u>un-verified</u>	The ECS shall be capable of sending to the SCF Calibration Coefficients. These shall include the calibration coefficients requested by the scientist at	<u>Calibration coefficients are interpreted as 1) calibration and other coefficients and 2) SCF-generated ancillary data needed by</u>	

		<u>al</u>					the SCF in the Calibration Coefficient Request.	the DAAC processing of science software.	
S C F- 03 30 #A	2 4 6 3	<u>TB</u> <u>Dm</u> <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to receive a Calibration Coefficient Update Package from the SCF. This package shall include a calibration coefficient file and other documentation needed to implement the updated coefficients.	<u>Calibration coefficients are interpreted as 1) calibration and other coefficients and 2) SCF-generated ancillary data needed by the DAAC processing of science software.</u>	
S C F- 03 40 #A	2 4 6 5	<u>TB</u> <u>Dm</u> <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>test</u>	<u>un-verified</u>	The SCF shall have the capability to send a Request for Processing Status to the ECS for the status of SCF-requested data processing.	<u>ECS has an implied requirement to receive the status requests from SCFs. Reprocessing status and processing status are identical.</u>	
S C F- 03 50 #A	2 4 6 7	<u>TB</u> <u>Dm</u> <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to provide SCF with the Processing Status of SCF-requested data processing.	<u>Reprocessing status and processing status are identical.</u>	
S C F- 03 60 #A	2 4 6 9	<u>TB</u> <u>Dm</u> <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>test</u>	<u>un-verified</u>	The SCF shall have the capability to send a Request for Resource Usage to the ECS for information about ECS resource usage during SCF-requested data processing.	<u>ECS has an implied requirement to receive the status requests from SCFs.</u>	
S C F- 03 70 #A	2 4 7 1	<u>TB</u> <u>Dm</u> <u>issi</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>test</u>	<u>un-verified</u>	The ECS shall have the capability to provide SCF with information about ECS Resource Usage during SCF-requested data processing.		
S		<u>TB</u>	SD	int	<u>de</u>	<u>un-verified</u>		<u>ECS has an implied</u>	

C F- 03 80 #A	2 4 7 3	Dm <u>iss</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	PS	erf ac e	<u>mo</u>		The SCF shall have the capability to send a Request for Product History (including the algorithms used) to the ECS for the history of data products that the SCF specifies.	<u>requirement to receive the status requests from SCFs. Product history means production history.</u>	
S C F- 03 90 #A	2 4 7 5	TB <u>Dm</u> <u>iss</u> <u>on</u> <u>ess</u> <u>enti</u> <u>al</u>	SD PS	int erf ac e	<u>de</u> <u>mo</u>	<u>un-verified</u>	The ECS shall have the capability to provide SCF with the Product History of data products that the SCF specifies.	<u>Product history means production history.</u>	